

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior listings and versions of claims in this application.

Please cancel claim 62 without prejudice or disclaimer.

Listing of claims

1. (Withdrawn) A method for stabilizing reduced coenzyme Q10 which comprises obtaining a composition by admixing reduced coenzyme Q10 with a fat and oil (excluding olive oil) and/or a polyol as the main component in which the stabilization of reduced coenzyme Q10 is not substantially inhibited and thereby protecting reduced coenzyme Q10 against oxidation.

2. (Withdrawn) The method according to claim 1, wherein the fat and oil comprises at least one fat and oil selected from among coconut oil, palm oil, palm kernel oil, linseed oil, camellia oil, brown rice germ oil, avocado oil, rapeseed oil, rice oil, peanut oil, corn oil, wheat germ oil, soybean oil, perilla oil, cottonseed oil, sunflower seed oil, kapok oil, evening primrose oil, shea butter, sal fat, cacao butter, sesame oil, safflower oil, lard, milk fat, fish oil, and beef tallow, modified fat and oil derived from these by fractionation, hydrogenation, transesterification or the like, medium-chain fatty acid triglycerides, fatty acid partial glycerides, and phospholipids.

3. (Canceled)

4. (Withdrawn) The method according to any one of claims 1 to 3, wherein the fat and oil/(fat and oil + polyol) weight ratio is not lower than 1/10.

5-7. (Canceled)

8. (Withdrawn) The method according to claim 1,

wherein the content of reduced coenzyme Q10 in the composition is higher than 5% by weight.

9-11. (Canceled)

12. (Withdrawn) The method according to claim 1,

wherein the percent retention of reduced coenzyme Q_{10} after 3 days storage in the air at 40° C under a light-shielded condition is not lower than 95%, with the percent retention in the corresponding composition composed of reduced coenzyme Q_{10} , the fat and oil and/or polyol alone after storage under the same conditions being taken as 100%.

13. (Withdrawn) A composition

which comprises reduced coenzyme Q_{10} , a fat and oil (exclusive of olive oil) and/or a polyol and in which the stabilization of reduced coenzyme Q_{10} is not substantially inhibited.

14. (Canceled)

15. (Withdrawn) The composition according to claim 13,

wherein the polyol comprises at least one polyol selected from among glycerol, propylene glycol and polyethylene glycol.

16. (Canceled)

17. (Withdrawn) The composition according to claim 13,

wherein the content of vitamin E, when the same is further contained in the composition, is lower than 4% by weight based on the system excluding coenzyme Q_{10} .

18-19. (Canceled)

20. (Withdrawn) The composition according to claim 13,

wherein the content of reduced coenzyme Q₁₀ in the composition is higher than 5% by weight.

21-27. (Canceled)

28. (Withdrawn) The composition according to claim 13,

wherein the percent retention of reduced coenzyme Q₁₀ after 3 days storage in the air at 40°C under a light-shielded condition is not lower than 95%, with the percent retention in the corresponding composition composed of reduced coenzyme Q₁₀, the fat and oil and/or polyol alone after storage under the same conditions being taken as 100%.

29. (Currently Amended) A reduced coenzyme Q₁₀-containing composition which comprises reduced coenzyme Q₁₀, a polyglycerol fatty acid ester, and a fat component, ~~and an~~ oil component and/or a polyol,

wherein ~~the~~ a content of vitamin E, when the same is further contained in the composition, is lower than 4% by weight based on total weight of the composition minus a weight of coenzyme Q₁₀; ~~and the~~ a content of Tween and/or Span species, when the same is further contained in the composition, is not higher than 30% by weight based on total weight of the composition minus a weight of coenzyme Q₁₀; ~~and wherein the fat component or oil component is at least one member selected from the group consisting of~~ coconut oil, palm oil, palm kernel oil, linseed oil, camellia oil, brown rice germ oil, avocado oil, rapeseed oil, rice oil, peanut oil, corn oil, wheat germ oil, soybean oil, perilla oil, cottonseed oil, sunflower seed oil, kapok oil, evening primrose oil, shea butter, sal fat, cacao butter, sesame oil, safflower oil, olive oil, lard, milk fat, fish oil, beef tallow, modified fat component or oil component, medium-chain fatty acid triglycerides, fatty acid partial glycerides, and phospholipids, wherein the modified fat component or oil component is derived from at least one member selected from the group consisting of coconut oil, palm oil, palm kernel oil, linseed oil, camellia oil, brown rice germ oil, avocado oil, rapeseed oil, rice oil, peanut oil, corn oil, wheat germ oil, soybean

oil, perilla oil, cottonseed oil, sunflower seed oil, kapok oil, evening primrose oil, shea butter, sal fat, cacao butter, sesame oil, safflower oil, olive oil, lard, milk fat, fish oil, and beef tallow by one of fractionation, hydrogenation and transesterification.

30. (Canceled)

31. (Currently Amended) The composition according to claim 29 or 62, wherein the polyol comprises at least one polyol selected from among glycerol, propylene glycol and polyethylene glycol.

32. (Canceled)

33. (Previously Presented) The composition according to claim 29, wherein the content of the fat and oil component and/or polyol in the composition is not lower than 50% by weight based on the system excluding coenzyme Q₁₀.

34. (Previously Presented) The composition according to claim 29 which further comprises an ascorbic acid.

35. (Canceled)

36. (Previously Presented) The composition according to claim 34, wherein the content of the ascorbic acid is not higher than 30% by weight based on the system excluding reduced coenzyme Q₁₀.

37-38. (Canceled)

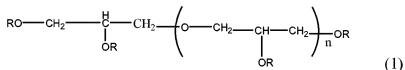
39. (Previously Presented) The composition according to claim 34 which further comprises a surfactant other than polyglycerol fatty acid esters.

40. (Original) The composition according to claim 39, wherein the surfactant other than polyglycerol fatty acid esters is a Tween or Span species.

41. (Previously Presented) The composition according to claim 39, wherein the content of the surfactant other than polyglycerol fatty acid esters is not higher than 90% by weight based on the system excluding coenzyme Q₁₀.

42-45. (Canceled)

46. (Previously Presented) The composition according to claim 29, wherein the polyglycerol fatty acid ester is represented by the following formula (1):



in the formula, n represents an integer of 1 to 29 and the four R's each independently represents a fatty acid residue containing 2 to 22 carbon atoms or a hydrogen atom, exclusive of the case where all R's are hydrogen atoms.

47-48. (Canceled)

49. (Previously Presented) The composition according to claim 29, wherein the polyglycerol fatty acid ester has an HLB value of 4 to 12.

50. (Canceled)

51. (Previously Presented) The composition according to claim 29,

wherein the fatty acid residue or residues in the polyglycerol fatty acid ester each contains not less than 8 carbon atoms and the degree of polymerization of glycerol is not higher than 10.

52-60. (Canceled)

61. (Previously Presented) The composition according to claim 29,

wherein the percent retention of reduced coenzyme Q₁₀ after 3 days storage in the air at 40°C under a light-shielded condition is not lower than 70%, with the percent retention in the corresponding composition composed of reduced coenzyme Q₁₀, the fat and oil component and/or polyol alone after storage under the same conditions being taken as 100%.

62-63. (Cancelled)

64. (Previously Presented) The composition according to Claim 29,

wherein the content of reduced coenzyme Q₁₀ in the composition is higher than 5% by weight.

65. (Cancelled)

66. (Previously Presented) The composition according to Claim 29, wherein the reduced coenzyme Q₁₀ is an externally added one.

67. (Previously Presented) The composition according to Claim 29,

wherein the content of the polyglycerol fatty acid ester is not lower than 1 % by weight based on total weight of the composition minus a weight of coenzyme Q₁₀.

68. (Cancelled)

69. (Previously Presented) The composition according to Claim 29,

wherein the ratio of number of fatty acid residues in polyglycerol fatty acid ester to degree of polymerization of glycerol is 1/4 to 1/2.

70. (Previously Presented) The composition according to Claim 29,

wherein the polyglycerol fatty acid ester is a diglycerol fatty acid ester.

71. (Previously Presented) The composition according to Claim 70,

wherein the diglycerol fatty acid ester comprises at least one species selected from among diglycerol monocaprate, diglycerol monolaurate, and diglycerol monooleate.

72. (Previously Presented) The composition according to Claim 71,

wherein the diglycerol fatty acid ester is diglycerol monooleate.

73. (Previously Presented) The composition according to Claim 29 which is prepared or stored in a deoxygenized atmosphere.

74. (Previously Presented) The composition according to Claim 29 which is processed in an oral dosage form.

75. (Previously Presented) The composition according to Claim 74, said dosage form being capsules.

76. (Previously Presented) The composition according to Claim 75, said capsules being soft capsules.

77. (Previously Presented) The composition according to Claim 75, said capsules being packed in a phial, bottle, plastic bag, aluminum laminate bag, PTP packaging, three side-sealed packaging, four side-sealed packaging, strip packaging, aluminum shaped packaging or stick packaging.

78. (Previously Presented) The composition according to Claim 29,

wherein the content of the polyglycerol fatty acid ester is not higher than 50% by weight based on total weight of the composition minus a weight of coenzyme Q₁₀.